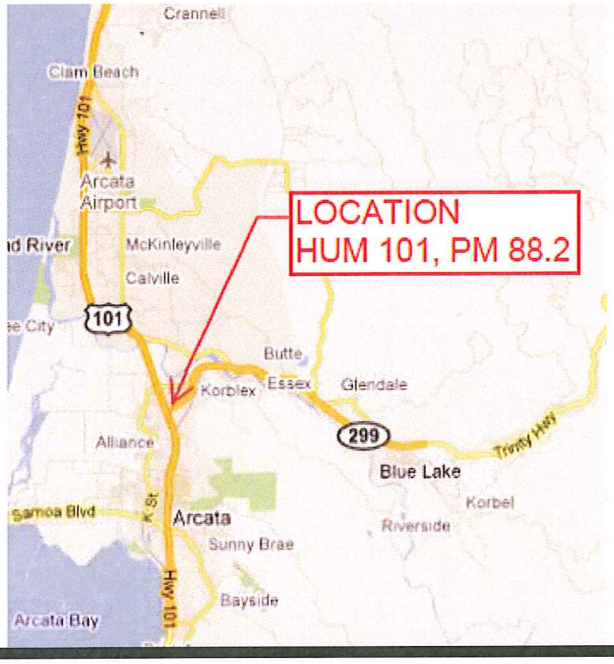
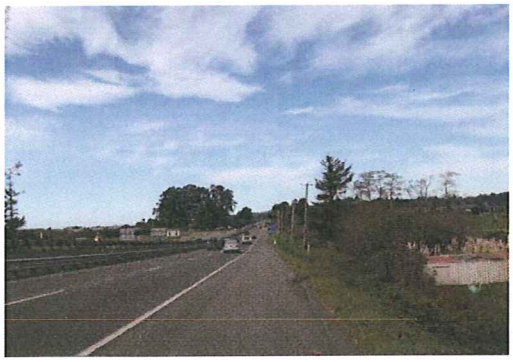
01-HUM-101 PM 88.20/88.30
Program Code: 20.201.010
01-0A250K (01 00020 299)
September 2011

Project Study Report/Project Report (Safety Project)

To Request Programming Amendment to the 2010 SHOPP and Provide Project Approval



IN HUMBOLDT COUNTY NEAR ARCATA AT THE ROUTE 101-299 JUNCTION



NB Route 101

NB Route 101 off ramp

I have reviewed the right of way information contained in this Project Study Report/Project Report and the R/W Data Sheet attached hereto, and find the data to be complete, current and accurate:

Karen Hawkins
North Region Division Chief – Right of Way

APPROVAL RECOMMENDED:

Richard Mullen
Project Manager

Ralph Martinelli
Program Advisor

APPROVED:

CHARLES C. FIELDER
District Director

9/22/2011
Date

This Project Study Report/Project Report (PSR/PR) has been prepared under the direction of the following registered civil engineer in the District 1 Advance Planning Office. The registered civil engineer attests to the technical information contained herein and has judged the qualifications of any technical specialists providing engineering data upon which recommendations, conclusions, and decisions are based.

Brian Simon
Registered Civil Engineer

Sept 14, 2011
DATE

Project Study Report/Project Report

1. INTRODUCTION

This project proposes to apply a high friction surface treatment (HFST) to the existing connection ramp at the Routes 101/299 interchange. This improvement proposes to reduce the numerous run-off-road (ROR) collisions on the northbound US 101 to eastbound State Route 299 freeway-to-freeway connection ramp in Humboldt County. See location map (Attachment A).

The scope of work of this roadway safety project includes preparing the existing roadway surface of the ramp deceleration lane and curve, and applying the high friction, hard wearing product. (Project Layout Attachment B)

US 101 in Humboldt County is a two lane and multilane freeway predominantly. This section of Route 101 is a multilane freeway connecting to eastbound Route 299, which is also a freeway. The Route 101 ramp section has shoulders that range between 2' and 6' within the project limits. (Typical Sections, Attachment C)

The estimated construction cost is $320,000 (2011). There is no right of way cost associated with this project. The total project cost is $320,000 (2011). (See Attachment D)

Project Limits: (Dist., Co., Rte., PM)	01-HUM-101 PM 88.20/88.30
Number of Alternatives:	2, including the "no build" alternative
Alternative Recommended for Programming:	Alternative 1
Programmed or Proposed Capital Construction Costs:	$320,000 (2011)
Programmed or Proposal Capital Right of Way Costs:	$ 0 (2011)
TOTAL PROJECT COST	$320,000 (2011)
Funding Source:	SHOPP
Type of Facility (conventional, expressway, freeway):	Freeway (4-Lane)
Number of Structures:	0
Anticipated Environmental Determination/Document:	CE CEQA CE NEPA
Legal Description:	In Humboldt County near Arcata at the Route 101/299 Junction
Project Category:	201.010
Proposed Construction Year	2012

2. BACKGROUND

A. Project History

This location has a total collision rate of five times the statewide average when compared to similar facilities. Many of the collisions experienced at this location are ROR (Run-Off-Road) type and 80% occurred during wet pavement conditions. Incremental improvements such as OGAC and upgrade signs have been implemented in the past in an effort to reduce collisions. A realignment to increase the connector ramp curve to a 1,000' radius, extend the deceleration lane and add an OGFC surface which would meet current design standards was initially considered. However, at a March 1, 2011, project kickoff meeting it was revealed that utility poles and underground utilities would need to be relocated if a realignment alternative was pursued.

Right of Way indicated that the utility relocation cost would be $500,000 in May, 2011. A Traffic Safety Decision Document (Attachment E) determined that the overall cost of the geometric improvement project alternative was no longer fundable. Due to the funding limitations, a multipurpose high friction surface, hard wearing tire grip product alternative was proposed to improve the roadway frictions and reduce the number of collisions. This alternative is described below as Alternative 1. Similar treatments have been applied recently in Districts 3 and 7.

B. Existing Facility

Within the project limits US 101 is classified as a 4-lane freeway with 12' lanes, 2' to 8' outside shoulders, and 2' to 5' inside shoulders. Route 299 is a freeway with 12' lanes and 4' to 6' outside shoulders. The ramp has a 12' lane, a 2' to 6' outside shoulder and 2' to 4' inside shoulder. The existing curve radius is 300'. The posted speed limit on US 101 and Route 299 is 65 mph within the project limits. Warning signage ahead of the ramp advises drivers to limit their speed on the curve to 35 mph. The existing deceleration lane is 170'long.

US 101 is segmented into 22 sections for System Planning purposes. This project is located in segment 14, illustrated in the following table:

Segment #	HUM 101 PM	DESCRIPTION
14	85.8/109.04	From Junction of Route 255 to Big Lagoon

C. Geometric Information

This project is part of the Routes 101/299 interchange. No geometric improvements are proposed with this PSR. Rather, a high friction surface treatment will be applied to the traveled way and shoulders of the existing northbound US 101 to eastbound Route 299 connection ramp.

3. PURPOSE AND NEED

Project Need: The project is needed because there were a total of 20 collisions within a five-year period, 16 of which occurred during wet conditions. A collision pattern of run-off-road during wet conditions was identified within the project limits, resulting in a collision rate five times the statewide average for similar facilities.

Project Purpose: The purpose of the project is to reduce the frequency of run-off-road and wet condition collisions by applying a high friction surface treatment to the roadway.

4. DEFICIENCIES

The existing Routes 101/299 freeway to freeway connection ramp curve is 300'. In the Highway Design Manual, the standard ramp curve radius for the posted speeds of these two freeways is 1,000'. The existing inside shoulder ranges from 2 to 4' and the outside shoulder ranges from 2 to 6'. Standard shoulders for the right side are 10' and 5' for the left side of the traveled way of ramps. The existing deceleration lane is 170' long. Standard deceleration length is 270'.

5. COLLISION HISTORY

A traffic collision analysis was performed for this segment of US 101/Route 299. In the 5-year period TASAS Table B collision analysis from January 1, 2004 to December 31, 2008, there were 20 collisions within the project limits, 16 of which occurred during wet pavement conditions. The total collision rate for this segment is five times greater than the statewide average for similar facilities. (See Attachment L)

6. CORRIDOR AND SYSTEM COORDINATION

This segment of US 101 originates at the 101/255 junction and extends northbound to Big Lagoon in Humboldt County. US 101 is the economic lifeline of the north coast and the most important route in the District. It is a principal arterial serving interregional and interstate traffic, with relatively high traffic volumes and heavy use by both truck and tourist traffic.

Route 299 is a major goods movement route serving the Northern California. It is used to transport food and other essential supplies to communities along this corridor, and to transport goods to market. The Route also provides important west-east connections from US 101 to Interstate 5.

Traffic Data:

The current and forecasted traffic data is listed below. This data was provided in memorandums dated April 21, 2011 and January 11, 2011, from the Office of Travel Forecasting and Modeling. (Attachment M)

County **Highway** **Post Mile**	**HUM** **101** **88.20/88.30**
Annual ADT	
Base Year 2004	5,570
2014	6,400
2024	7,240
2034	8,070
Peak Hour	
Base Year 2004	500
2014	575
2024	650
2034	725
10-Year Traffic Index:	11.0
20-Year Traffic Index:	12.0

7. ALTERNATIVES

A geometric approach was initially considered for this location. However, this was deemed infeasible due to the cost being above what could be supported by the SI calculations. Considering this situation, the project strategy was updated at the request of the project sponsor, Traffic Safety (Attachment E), to propose the application of a high friction surface treatment product. The other alternative that was considered is the "No Build" alternative.

Alternative 1

The project proposes to apply a high friction surface treatment (HFST) to the traveled lanes and shoulders of the exit/entrance of the northbound US 101 to eastbound Route 299 freeway to freeway connection. The preference is to have this material installed such that each row of a vehicle's tires (front, back) would enter the HFST field at same time. In this way, the vehicle and driver would not experience a differential friction effect. High friction surface treatments generally consist of a binder material (epoxy-resin, polyurethane-resin, etc) applied to a prepared surface. Before this binder cures, the material is topped with a thin layer of a hard wearing aggregate (calcined bauxite, granite, dolomite, etc) which is broadcast into place.

Application of HFST product includes cleaning existing surfaces and crack treatment. HFST applications require dry conditions with temperatures at each manufacturer's recommendations (typically 50-60° F). After HFST application, the new surface will receive painted pavement marking treatment. Shoulder backing is not anticipated due to the thinness of the HFST.

This document does not endorse or recommend any specific manufacturer, but does acknowledge the Non-Standard Special Provisions (NSSP) state that calcined bauxite is the required aggregate for a HFST. Additionally, coloring (red, blue, green etc) of the aggregate surface is not proposed.

Alternative 2

No build. This alternative does not meet the purpose and need of the project.

8. COMMUNITY INVOLVEMENT

There has been no community interaction in this project and it is anticipated that there will be no opposition to the planned improvements. Public notification of ramp closures will be required.

9. DESIGN EXCEPTIONS

The scope of this project was discussed with the HQ Design Reviewer, Heidi Sykes, on May 18, 2011. During this discussion it was determined that the scope of this project is similar to a CAPM overlay and no Design Exceptions would be required.

10. ENVIRONMENTAL DETERMINATION/DOCUMENT

A Mini Preliminary Environmental Assessment Report (Mini-PEAR) was originally prepared for this project for 1st Level Draft. From draft document review and comments, a decision was made to revise the environmental document to conserve resources by delivering a PSR/PR with a CE/CE under NEPA/CEQA. Said environmental document is included as attachment G.

Hazardous Waste

An Initial Site Assessment (ISA) was prepared for this project on February 4th, 2011 and found no significant hazardous waste issues associated with this project. The removal of yellow thermoplastic stripe was listed as a minor issue. There is a potential for low level of aerial deposited lead in adjacent soils, which will not be disturbed with the scope of this project. The ISA is included as Attachment H.

11. OTHER CONSIDERATIONS

A. TRANSPORTATION MANAGEMENT PLAN

A Transportation Management Plan has been prepared and is included as Attachment J. The plan, which will be revised to reflect peak traffic counts, will be revised during design stage to address specific days of ramp closure and detour routing. When determining the work periods in the lane closure chart, consider limiting work hours to periods where exposure of employees to traffic is reduced.

B. RIGHT OF WAY

No new right of way will be required. The proposed staging area for this project is within the existing right of way.

C. MATERIALS RECOMMENDATIONS

The strategy proposed for the structural section repairs and preparation for the application of the multipurpose high friction surface, hard wearing tire grip product is included in Attachment I. It is recommended to place a coating of Thin High Friction Surface Treatment, closely following manufacturer's recommendations and Caltrans Non-Standard Special Provision NSSP_39HSFT_E_D07-28-10r7.

D. STORM WATER

In the interest of conserving resources and in light of the limited storm water issues with the scope of this alternative, preparation of a Storm Water Data Sheet for this project will be deferred to PS&E.

E. TRAFFIC COUNTING STATION

A permanent traffic counting station is near the project. If protection of the station loops is impracticable or the loops are inoperable after HFST application, replacement or repair of the system will need to be added to project scope. Funding for said work has been added to roadway items of the cost estimate.

F. DRAINAGE

Because no drainage changes/improvements/upgrades are proposed and the project will not increase impervious surfaces nor will it increase or change runoff patterns, a Drainage Report Exemption is appropriate for this project. This exemption is deferred to the next phase.

12. FUNDING

This PSR recommends a total of $320,000 be amended into the 2010 SHOPP cycle for construction capital and right of way. This project is a candidate for the Collision Reduction Safety Improvement Program (201.010). A summary of scheduled costs and resources are shown in the following table:

Item	Estimated Construction Cost (2011) Alt. 1
Structure	$ 0
Roadway	$ 320,000
Total Construction	$ 320,000
R/W	$ 0
Total Project Capital	$ 320,000

13. FEDERAL COORDINATION

This project is eligible for federal funding and is considered to be State authorized under current FHWA Caltrans Stewardship agreements. FHWA will review this project for funding approval during the PS&E phase.

14. SCHEDULE

The tentative Project Schedule is shown in the following table:

HQ Milestones	Delivery Date
Begin Environmental Document (ED)	2/1/2011
PA/ED	9/15/2011
PS&E	2/1/2012
R/W Certification	7/1/2012
Ready to List	7/15/2012
Approved Construction Contract	11/15/2012
Contract Acceptance	7/1/2013
Construction End	4/1/2015

15. DISTRICT CONTACTS

Name	Title	Phone Number
Juan C. Trupp	Transportation Engineer (Civil)	(707) 445-6458
Brian Simon	Project Engineer	(707) 441-3935
Richard Mullen	Project Manager	(707) 441-5877
Ilene Poindexter	Chief, Advance Planning	(707) 441-3969
Ralph Martinelli	Chief, Traffic Safety	(707) 445-6376
Troy Areseneau	Chief, Traffic Operations	(707) 445-6377
Thomas Balkow Andre Benoit	Environmental Senior Environmental Coordinator	(530) 225-3405 (530) 225-3302
Dave McCanless	Senior Right of Way Agent	(707) 445-6424

16. PROJECT REVIEWS

Field Review, Partial PDT	November 8, 2010
District Maintenance	June 3, 2011
HQ Design Coord. (H. Sykes, J Deluca)	April 5, 2011, May 18, 2011 & June 3, 2011
Project Manager, Richard Mullen	June 3, 2011, August 12, 2011
Safety Review, Steve Hughes	June 3, 2011

17. ATTACHMENTS

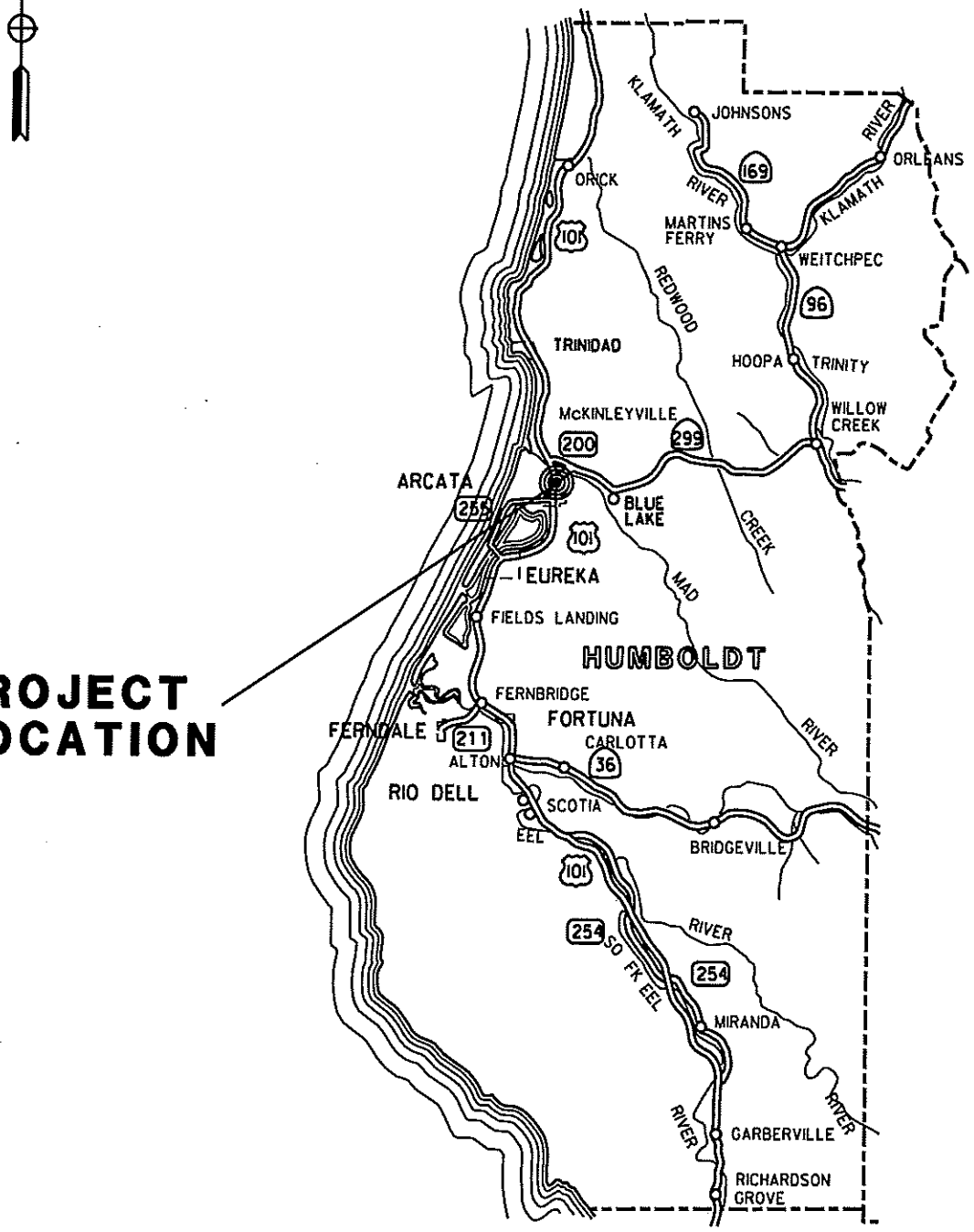
A. Project Location Map
B. Project Layout
C. Typical Section
D. Cost Estimate
E. Traffic Safety Decision Document
F. Programming Sheet
G. Environmental Documentation (CE/CE)
H. Initial Site Assessment
I. Materials Recommendations
J. Transportation Management Plan
K. Right of Way Data Sheet
L. Collision History (Table B Summary)
M. Traffic Data

ATTACHMENT A

PROJECT LOCATION MAP

VICINITY MAP

No Scale



PROJECT LOCATION

RAMP IMROVEMENT
01-HUM-101 PM 88.2/88.3
01-0A250K

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ATTACHMENT B

PROJECT LAYOUT

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	88.20/88.30	1	1

REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

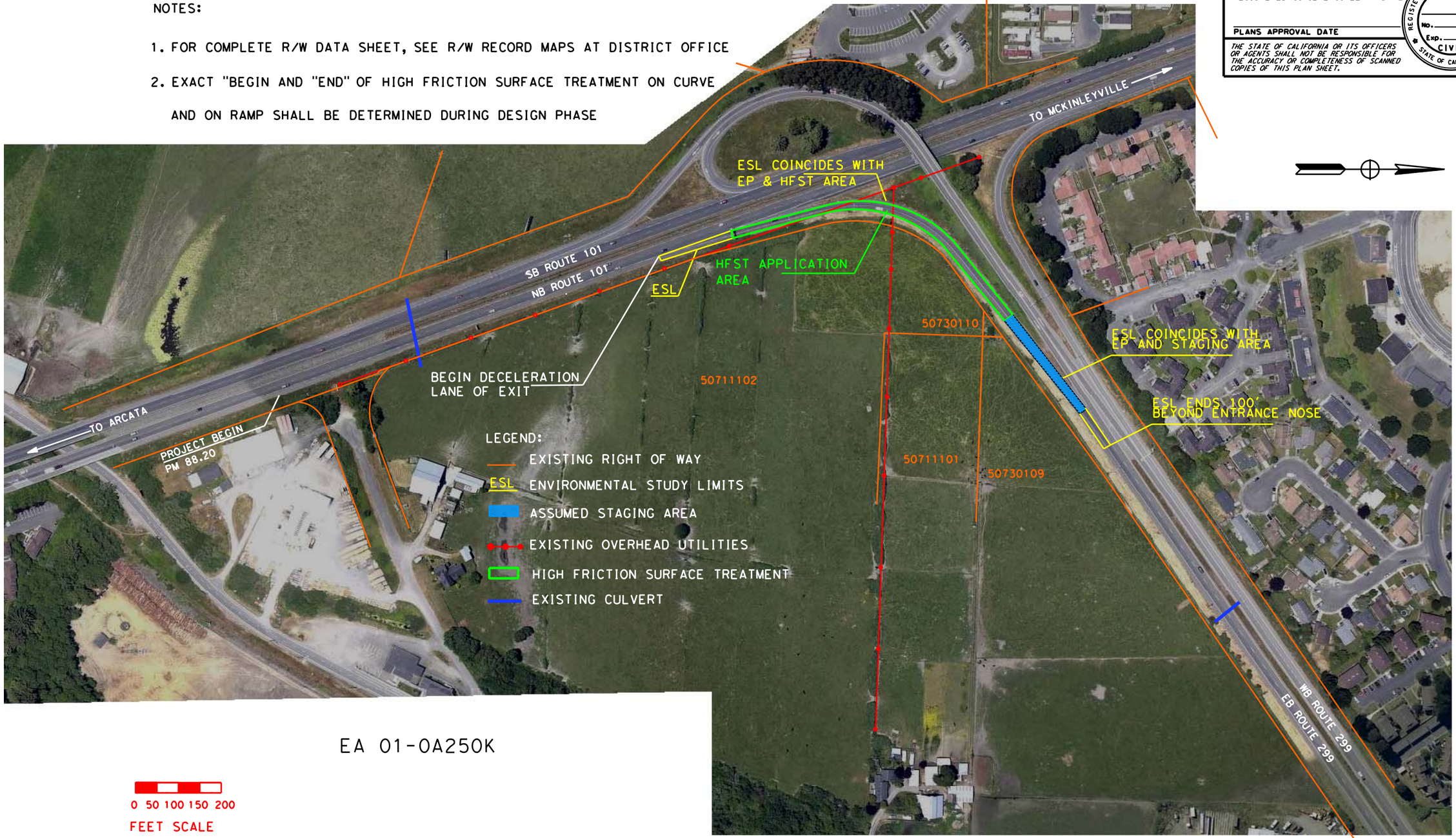
REGISTERED PROFESSIONAL ENGINEER — No. Exp. CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

EA 01-0A250K HUM 101 (PM 88.2/88.3)

NOTES:

1. FOR COMPLETE R/W DATA SHEET, SEE R/W RECORD MAPS AT DISTRICT OFFICE
2. EXACT "BEGIN AND "END" OF HIGH FRICTION SURFACE TREATMENT ON CURVE AND ON RAMP SHALL BE DETERMINED DURING DESIGN PHASE



EA 01-0A250K

0 50 100 150 200
FEET SCALE

FOR PROJECT IDENTIFICATION ONLY

NB 101/299 CONNECTOR RAMP IMPROVEMENT LAYOUT

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

BORDER LAST REVISED 4/11/2008

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DGN FILE => $REQUEST

CU 00000

EA 0A250K

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ATTACHMENT C

TYPICAL SECTIONS

Dist	COUNTY	ROUTE	POST MILES TOTAL PROJECT	SHEET No.	TOTAL SHEETS
01	HUM	101	88.2/88.3	1	1

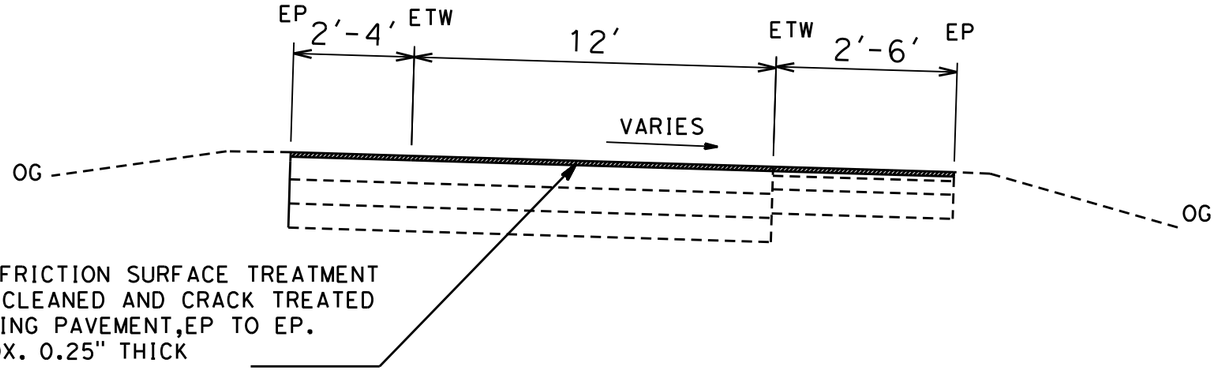
REGISTERED CIVIL ENGINEER DATE

PLANS APPROVAL DATE

REGISTERED PROFESSIONAL ENGINEER — No. — Exp. — CIVIL — STATE OF CALIFORNIA

THE STATE OF CALIFORNIA OR ITS OFFICERS OR AGENTS SHALL NOT BE RESPONSIBLE FOR THE ACCURACY OR COMPLETENESS OF SCANNED COPIES OF THIS PLAN SHEET.

NB 101 /EB 299
Connector Ramp
PM 88.20



Preliminary Design

RAMP IMPROVEMENT
HUM 101 PM 88.2/88.3
EA 01-0A250K

REVISED BY | DATE REVISED

CALCULATED-DESIGNED BY | CHECKED BY

FUNCTIONAL SUPERVISOR

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION
Caltrans

LAST REVISION 00-00-00 | DATE PLOTTED => $DATE | TIME PLOTTED => $TIME

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EA 01-0A250K

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ATTACHMENT D

COST ESTIMATE

HUM 101 PM 88.2/88.3
Safety Improvement

Project Description: HUM 101/299 Interchange
EA 01-0A250K
EFIS 01 00020299

Alternative 1: High Friction Surface Treatment (HFST)

SUMMARY OF PROJECT COST ESTIMATE

TOTAL ROADWAY ITEMS	$320,000
TOTAL STRUCTURE ITEMS	$0
SUBTOTAL CONSTRUCTION COSTS	$320,000
TOTAL RIGHT OF WAY ITEMS	$0
TOTAL PROJECT CAPITAL OUTLAY COSTS	**$320,000**

Reviewed by District Program Manager _____ Date 9-16-11

Approved by Project Manager _____ Date 9/22/11

I. ROADWAY ITEMS

Section 1 Earthwork	Quantity	Unit	Unit Price	Item Cost
			Subtotal Earthwork	**$0**

Section 2 Pavement Structural Section	Quantity	Unit	Unit Price	Item Cost
High Friction Surface Treatment	2,300	SQYD	$40	$92,000
Cold Plane AC	100	SQYD	$28	$2,800
Crack Treatment	0.5	LNMI	$5,000	$2,500
			Subtotal Pavement Structural Section	**$97,300**

Section 3 Drainage	Quantity	Unit	Unit Price	Item Cost
			Subtotal Drainage	**$0**

Section 4 Specialty Items	Quantity	Unit	Unit Price	Item Cost
Progress Schedule (Critical Path)	1	LS	$10,000	$10,000
Repair/Replacement of Traffic Counting Station Loop	1	LS	$10,000	$10,000
Construction Site Management	1	LS	$10,000	$10,000
Prepare Storm Water Pollution Prevention Plan	1	LS	$5,000	$5,000
Temporary BMP Items	1	LS	$10,000	$10,000
Remove Thermoplastic Striping	1,600	LF	$1	$1,600
Remove Pavement Markers	80	EA	$3	$240
			Subtotal Specialty Items	**$46,840**

Section 5 Traffic Items	Quantity	Unit	Unit Price	Item Cost
Thermplastic Striping (4")	1,600	LF	$2.25	$3,600
Pavement Marker (Type D-Retroflective)	80	EA	$15.00	$1,200
Portable Changeable Message Sign (PCMS)	4	EA	$5,000	$20,000
Construction Area Signs	1	LS	$10,000	$10,000
			Subtotal Traffic Items	**$34,800**

Traffic Additions (Added in "TOTAL SECTIONS 1 thru 5)				
Traffic Control System	1	LS	(10% Item Subtotal)	$17,900
Maintain Traffic	1	LS	(5% Item Subtotal)	$9,000

SUBTOTAL	**$178,940**
TOTAL SECTIONS 1 thru 5	**$205,840**

Section 6 Minor Items		
Miscellaneous Construction (AC dike, MBGR markers, connections, and other misc items)		
$205,840 x (5%) = (Subtotal Sections 1 thru 5)		$10,292
TOTAL MINOR ITEMS		**$10,292**

Section 7 Roadway Mobilization	
$216,132 x (10%) = (Subtotal Sections 1 thru 6)	$21,613
TOTAL ROADWAY MOBILIZATION	**$21,613**

Section 8 Roadway Additions	Quantity	Unit	Unit Price	Item Cost
	Supplemental Work			
		$216,132 x (5%) = (Subtotal Sections 1 thru 6)		$10,807
	Contingencies			
		$216,132 x (30%) =		$64,840
	$ Per Hour	Hours Per Day	Work Days	
COZEEP setups @ $100 per Hour Working 10 Hour Days	$100	10	3	$3,000
Construction Office		RE Office ($2200/month for days)		$0
		(Subtotal Sections 1 thru 6)		$216,132

TOTAL ROADWAY ADDITIONS (Sections 7 & 8)	**$100,259**
TOTAL ROADWAY ITEMS	**$316,400**
CALL	**$320,000**

II. STRUCTURES ITEMS

SUBTOTAL STRUCTURES ITEMS (Sum of Total Cost for Structures)	**$0**

Railroad Related Costs:	NA	
SUBTOTAL RAILROAD ITEMS		**$0**

TOTAL STRUCTURES ITEMS	**$0**

III. RIGHT OF WAY ITEMS

A. Acquisition	$0
B. Mitigation acquisition & credits	$0
C. Project Development Permit Fees	$0
D. Utility Relocation (rough estimate, OH utilities of property line)	$0
E. Relocation Assistance (RAP)	$0
F. Clearance/Demolition	$0
G. Title and Escrow Fees	$0

TOTAL RIGHT OF WAY ITEMS	**$0**
CALL	**$0**

Anticipated Date of Right of Way Certification N/A
(Date to which Values are Escalated)

F. Construction Contract Work

Estimate Prepared By: Juan C. Trupp 445-6458

Estimate Checked By: B. Simon 441-3935

ATTACHMENT E

TRAFFIC SAFETY DECISION DOCUMENT

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: JUAN C. TRUPP
Advance Planning

Date: June 3, 2011

File: HUM 101
PM 88.20/88.30
EA 01-0A250K
HFST Overlay

From: MATT SMITH
District 1, Traffic Safety Office

Subject: Change in Scope for EA 01-0A250K

The purpose of this memo is to document the change in scope for the Safety Improvement project EA 0A250K. The Safety Index has been exceeded by unforeseen right of way costs and the project is no longer supported by the 201.010 program. The project was originally estimated at $1.45 million with a corresponding SI of 235. Right of way costs associated with mitigation and utility relocation have escalated the estimate to between $1.87 and $2.1 million. This exceeds an SI of 230.

This new scope for this project will include installing a high friction surface treatment (HFST) on the existing pavement. This improvement will address the numerous Run-Off-Road collisions associated with the 101N/299E ramp. Since a majority of the collisions occurred during wet conditions (16 of 20), a high friction surface treatment is an appropriate improvement for this location.

If you have any questions or concerns please contact Matt Smith at 707-445-6443.

cc: 1)MLSuchanek
2)RMMartinelli
3) MSmith
4) file

Tom Schriber

Richard Mullen

ATTACHMENT F

PROGRAMMING SHEET

PROGRAMMING SHEET - 2011/2012

EA: 01-0a250 | Project Manager: Richard Mullen | Date: 09/06/2011
Proj Name: Arcata Curve Improvement | Co-Rte-PM: HUM-101- 088.2/ 088.3 | Type: SHOPP

PROJECT SCHEDULE

MILESTONE		DATE (STATUS)
Begin Environmental Document	M020	02/01/2011 (A)
Begin Project Report	M040	02/01/2011 (A)
Circulate Environmental Document (DED)	M120	
Project Approval & Environmental Document (PA&ED)	M200	09/15/2011 (T)
District Submits Bridge Site Data to Structures	M221	
Right of Way Maps	M224	01/01/2012 (T)
Regular Right of Way	M225	03/01/2012 (T)
District Plans, Specifications & Estimates to DOE	M377	02/01/2012 (T)
Draft Structures Plans, Specifications & Estimates	M378	
District Plans, Specifications & Estimates (PS&E)	M380	03/01/2012 (T)
Right of Way Certification	M410	07/01/2012 (T)
Ready to List (RTL)	M460	07/15/2012 (T)
Headquarters Advertise (HQ AD)	M480	10/15/2012 (T)
Approve Construction Contract	M500	11/15/2012 (T)
Contract Acceptance (CCA)	M600	07/01/2013 (T)
End Project	M800	04/01/2015 (T)

ESTIMATE	DATE	AMOUNT
ROADWAY	09/01/11	$ 320
BRIDGE		$ 0
Subtotal Const		$ 320
RIGHT OF WAY		$ 0
MITIGATION		$ 0
Subtotal RW		$ 0
GRAND TOTAL		$ 320

EXISTING PROGRAMMING	
PAED	$
PS&E	$
RW - Sup	$
RW - Cap	$
Const - Sup	$
Const - Cap	$

*Does not apply to RW Capital + Not Escalated ++ Only Escalated to 1 year into Future

PROJECT COSTS BY SB45 CATEGORY

CAPITAL COST ESTIMATE (Escalation Factor)	Prior Yrs+	11/12+	12/13 (3.5%)	13/14 (3.5%)	14/15 (3.5%)	15/16 (3.5%)	Future++ (3.5%)	Total	
Right of Way								$ 0	
Construction			331					$ 331	
					CAPITAL COSTS TOTAL			$ 331	
SUPPORT COSTS (Escalation Factor)			(1.5%)	(1.5%)	(1.5%)	(1.5%)	(1.5%)		Sup/Cap
PAED	23	28						$ 51	15.32%
PS&E		89	18					$ 107	32.18%
Right of Way		4	2	2	1			$ 9	2.84%
Construction			44	7	1			$ 52	15.69%
					SUPPORT COSTS TOTAL			$219	66.02%
					TOTAL PROJECT COSTS			$ 550	

PROJECT SUPPORT IN PYS

	Prior Yrs	11/12	12/13	13/14	14/15	15/16	Future	Total	PY %
Environmental	0.03	0.05	0.01	0.00	0.00	0.00	0.00	0.09	5.81%
Design	0.03	0.17	0.01	0.00	0.00	0.00	0.00	0.21	13.55%
Engineering Services	0.04	0.11	0.04	0.02	0.00	0.00	0.00	0.21	13.55%
Surveys	0.00	0.02	0.01	0.00	0.00	0.00	0.00	0.03	1.94%
Right of Way	0.01	0.03	0.01	0.00	0.00	0.00	0.00	0.05	3.23%
Traffic	0.02	0.08	0.03	0.00	0.00	0.00	0.00	0.13	8.39%
Construction	0.00	0.02	0.20	0.02	0.00	0.00	0.00	0.24	15.48%
Project Management	0.01	0.24	0.03	0.02	0.01	0.00	0.00	0.31	20.00%
District Units*	0.05	0.08	0.02	0.00	0.00	0.00	0.00	0.15	9.68%
Subtotal Dist/Region Resources	0.19	0.80	0.36	0.06	0.01	0.00	0.00	1.42	*91.61*%
59-DES Project Development	0.00	0.00	0.02	0.00	0.00	0.00	0.00	0.02	1.29%
59-DES Structures Foundation	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-Office Engineer	0.00	0.04	0.07	0.00	0.00	0.00	0.00	0.11	7.10%
59-DES Project Management	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Construction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
59-DES Other Units**	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00%
Subtotal DES Resources	0.00	0.04	0.09	0.00	0.00	0.00	0.00	0.13	*8.39*%
TOTAL PYs	**0.19**	**0.84**	**0.45**	**0.06**	**0.01**	**0.00**	**0.00**	**1.55**	

*Admin, Plng, Maintenance
**DES Admin, DES Plng, DES Maintenance
HRS/PYS = 1758
Comments:

ATTACHMENT G

ENVIRONMENTAL DOCUMENTATION

CATEGORICAL EXEMPTION/ CATEGORICAL EXCLUSION DETERMINATION FORM /AB

01-HUM-101	88.2/88.3	0A250K	
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

PROJECT DESCRIPTION:

The California Department of Transportation (Caltrans) proposes a safety improvement project at the 101 North/ 299 East interchange off-ramp in Humboldt County. The improvements consist of resurfacing the existing off-ramp with a pavement treatment that provides greater traction to vehicles in wet weather. ***(See continuation sheet, attached)***

CEQA COMPLIANCE *(for State Projects only)*

Based on an examination of this proposal, supporting information, and the following statements (See 14 CCR 15300 et seq.):

- If this project falls within exempt class 3, 4, 5, 6 or 11, it does not impact an environmental resource of hazardous or critical concern where designated, precisely mapped and officially adopted pursuant to law.
- There will not be a significant cumulative effect by this project and successive projects of the same type in the same place, over time.
- There is not a reasonable possibility that the project will have a significant effect on the environment due to unusual circumstances.
- This project does not damage a scenic resource within an officially designated state scenic highway.
- This project is not located on a site included on any list compiled pursuant to Govt. Code § 65962.5 ("Cortese List").
- This project does not cause a substantial adverse change in the significance of a historical resource.

CALTRANS CEQA DETERMINATION

Based on an examination of this proposal, supporting information, and the above statements, the project is:

☒ **Categorically Exempt. Section 15301 Existing Facilities, Class 1, c.** *which includes "...operation, repair, maintenance....or minor alteration of existing public...facilities...or topographic features, involving negligible or no expansion of use... ."*

Tom Balkow		Richard Mullen	
Environmental Branch Chief		Project Manager	
Signature	Date 8/31/11	Signature	Date 9/1/11

NEPA COMPLIANCE

In accordance with 23 CFR 771.117, and based on an examination of this proposal and supporting information, the State has determined that this project:

- does not individually or cumulatively have a significant impact on the environment as defined by NEPA and is excluded from the requirements to prepare an Environmental Assessment (EA) or Environmental Impact Statement (EIS), and
- has considered unusual circumstances pursuant to 23 CFR 771.117(b) (http://www.fhwa.dot.gov/hep/23cfr771.htm - sec.771.117).

In non-attainment or maintenance areas for Federal air quality standards, the project is either exempt from all conformity requirements, or conformity analysis has been completed pursuant to 42 USC 7506(c) and 40 CFR 93.

CALTRANS NEPA DETERMINATION

☒ **Section 6004:** The State has been assigned, and hereby certifies that it has carried out, the responsibility to make this determination pursuant to Chapter 3 of Title 23, United States Code, Section 326 and a Memorandum of Understanding (MOU) dated June 7, 2010, executed between the FHWA and the State. The State has determined that the project is a Categorical Exclusion under:

☒ **23 CFR 771.117(d): activity (d)(2).** *"Highway safety or traffic operations improvement projects... ."*

Tom Balkow		Richard Mullen	
Environmental Branch Chief		Project Manager	
Signature	Date 8/31/11	Signature	Date 9/1/11

Revised June 7, 2010

01-HUM-101	88.2/88.3	0A250K	
Dist.-Co.-Rte. (or Local Agency)	P.M/P.M.	E.A. (State project)	Federal-Aid Project No. (Local project)/ Proj. No.

Continued from page 1:

PROJECT DESCRIPTION

This project would improve safety by resurfacing the existing off-ramp with a paving material that provides better traction in wet weather conditions. All construction work, including staging would take place within the existing paved portion of the off-ramp and would take approximately one to two days to complete.

ENVIRONMENTAL CONSIDERATIONS

An environmental evaluation has been completed which consists of a record search and field surveys of the project limits. At the conclusion of this process, the following determinations were made:

Biological Resources. This project will not have an effect on biological resources. A memo has been prepared and is on file with the Department.

Cultural Resources. This project will not have an effect on cultural resources. A memo has been prepared and is on file with the Department.

Hazardous Waste. An Initial Site Assessment has been prepared. No hazardous waste sites or hazardous levels of toxic materials have been identified within the project limits. A memo has been prepared and is on file with the Department.

Right-of-Way. No additional Right-of-Way will be required to complete the proposed improvements.

ADDITIONAL INFORMATION

Construction drawings, and focused environmental studies are on file for this project at the Caltrans, District 2 office located at 1657 Riverside Drive, Redding, California.

ATTACHMENT H

INITIAL SITE ASSESSMENT

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

To: Juan C. Trupp
Advance Planning

Date: February 4, 2011

File No.: 01-HUM-101 - PM 88.20/88.30
0100020299
01-0A250K
Off-ramp/Junction 299

From: Steve Werner
North Region Office of Environmental Engineering—North

Subject: Initial Site Assessment

An Initial Site Assessment (ISA) was conducted for the above-referenced "Off-ramp/Junction 299" project as requested in your January 10, 2011 Initial Site Assessment (ISA) Request which included a layout and typical cross-section sheet for our review.

Based on the information provided, the ISA found that the project likely has potential hazardous waste issues that are nominal in nature. Those issues relate to lead, both in embankment soils from vehicle exhaust, referred to as Aerially Deposited Lead (ADL), and to disturbing thermoplastic stripe. These issues will require the contractor to prepare a Lead Compliance Plan (LCP). It is also possible that hazardous waste could be generated if yellow thermoplastic stripe is removed as a separate operation.

We do recognize that the near surface soils of the existing ramp embankment likely contain ADL. It appears, however, that if the existing ramp embankment is substantially removed, the resulting waste soils would not likely be considered hazardous waste due to the mixing of underlying soil material that would take place. Actual project costs for the noted issues during the construction phase of the project will likely be minimal.

Our research finds that the Right of Way proposed for acquisition appears to have no hazardous waste issues. For the purposes of determining the appropriate environmental documents required for the project, the work site(s) should not be considered to be on the *Hazardous Waste and Substances Site List (Cortese List)*.

We advise the project engineer to provide us the opportunity to review again during the project design phase to assure the project is free of significant hazardous waste issues.

ATTACHMENT I

MATERIALS RECOMMENDATIONS

State of California Business, Transportation and Housing Agency

Memorandum

To: Ilene Poindexter
Division Chief,
Advance Planning

Date: June 3, 2011

Attn: Brian Simon

File: 01-HUM-101
PM 88.20/88.30
Off-ramp/ Junction 299
EA: 01-0A250K,
EFIS # 0100020299 K

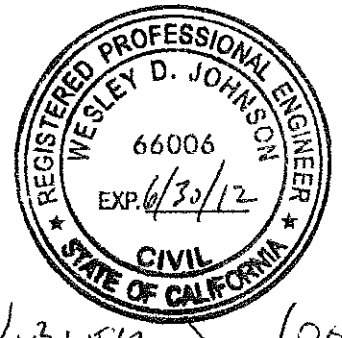
From: DEPARTMENT OF TRANSPORTATION - North Region
Wesley D. Johnson - North Region, Eureka Materials

Subject: Supplemental Materials Recommendation #1

In response to a request for a Revised Materials Recommendations from Juan C. Trupp of your office dated May 24, 2011, personnel from the Eureka Materials Lab reviewed the project site. The purpose of this visit was to review the condition of the existing pavement surface and determine its suitability to receive overlay. Strategies to increase the coefficient of friction at the pavement surface are presented below. This Supplemental Materials Report provides alternatives not considered in the Preliminary Materials Report dated March 1, 2011, and if the proposed repairs noted in the prior report are pursued, the recommendations contained in that report remain valid.

Existing Pavement Surface

The existing surface consists of a coarse, dense graded Hot Mix Asphalt. This surface treatment has been applied to the two tangent sections and the curved portion of the on-ramp. A review of the Materials Laboratory's Structural Section History Files and the "as-built" project files in the Document Retrieval System in the



WESLEY D. JOHNSON

Department's website did not indicate when this surface treatment was placed. The existing surface shows only minor wear and slight striping of the aggregate near the apex of the curve. Some minor reflective cracking was also noted. The overall condition of the existing surface is good and may be left in place prior to overlay with treatment products.

Repair of Existing Pavement

Prior to overlay of the existing pavement, the following repair strategy is recommended. Seal all cracks wider than 1/4 inch by rout and seal method. Please see Attachment "A" for details.
Upon completion of the crack seal work, select one of the following surface treatment strategies.

Alternative Strategy for High Friction Surface Treatment

Place a coating of Thin High Friction Surface Treatment such as TyreGrip® (or similar), closely following manufacturer's recommendations and Caltrans Non-Standard Special Provision NSSP_39HSFT_E_D07-28-10r7. This surface treatment consists of a high bond, two-component, cold-applied coating which is covered with a thick layer of high quality aggregates composed of calcined bauxite. Calcined bauxite is used due to its hardness, resistance to polishing, friction improvement, and commercial availability.
Due to concerns for surface irregularities and material discontinuities if this material is placed by hand (bucket method), application should be specified by machine only.

Notes:

- Ambient and roadway surface temperatures are critical to successful application of cold-applied epoxies. Additionally, the roadway surface must be free of moisture prior to application of surface treatment. For this reason, this project should schedule the work to be performed in mid to late summer months on the North Coast.

- Contractors applying the surface treatment should be selected from the list of qualified companies only as noted in the Non-Standard Special Provision. Please see Attachment "B" for a copy of Non-Standard Special Provision NSSP_39HSFT_E_D07-28-10r7.

- The roadway surface must be clean and dry prior to surface treatment application.

- Calcined bauxite at 1/4 inch gradation shall be used. No substitutions for aggregate type are to be permitted.

- Aggregate coverage must be complete without open spots of epoxy resin larger than 1/2 inch.

- Cover the entire roadway (ramp) surface from edge of pavement to edge of pavement with High Friction Surface Treatment.

- Place paint stripe pavement marking versus thermoplastic to prevent discontinuities in the friction surface as exiting vehicles routinely cross the traffic marking into and out of the shoulder.

Alternative Strategy for Surface Grinding

Place grooves 3/8 inch to 1/2 inch wide in the existing surface with grinding equipment to provide a grooved surface to help channel free water and alleviate hydroplaning under tire loading during wet conditions.

If you have any questions, please call me at (707)445-6386.

Attachments:

WJ:wj

cc: I. Poindexter
B. Simon
J. Trupp
R. Mullen
Lab Files

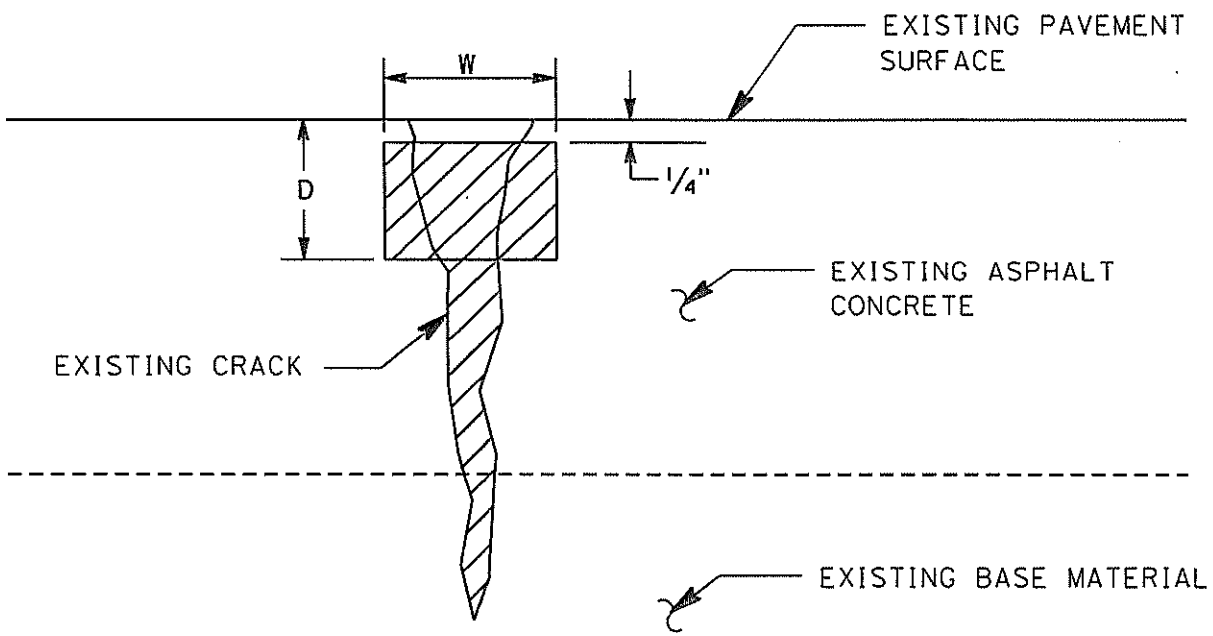
ATTACHMENT A

01-HUM-101 PM 88.20/88.30

01-0A250K

W = WIDTH OF ROUTING = WIDTH OF CRACK + 1/4" MIN

D = DEPTH OF ROUTING = W + 1/4" MIN



NOTES:

1. ALL CRACKS 1/4" WIDE OR GREATER ARE TO BE ROUTED AND SEALED.
2. IF ANY PART OF ANY CRACK IS 1/4" OR WIDER, THEN THE ENTIRE CRACK WILL BE ROUTED AND SEALED.
3. NO SEALANT MATERIAL WILL BE ALLOWED ON HMA PAVEMENT SURFACE.

CRACK SEALANT

SEAL RANDOM CRACKS

TYPICAL CROSS SECTION

Attachment B

01-HUM-101 PM 88.20/88.30
01-0A250K
Off-ramp/Junction 299

Caltrans Non Standard Special Provision

NSSP_39HSFT_E_D07-28-10r7 Thin High Friction Surface Treatment

10-1.__ THIN HIGH FRICTION SURFACE TREATMENT

GENERAL

Summary

This work will place a thin high friction surface treatment (HFST) onto asphalt concrete and portland cement concrete (PCC) pavement. The thin HFST is comprised of a single layer consisting of an epoxy-resin binder with a calcined bauxite aggregate topping. A second layer of thin HFST will be placed where shown on the plans.

Submittals

Submit a thin HFST Quality Control Plan (QCP) as per Section 5-1.02, "Plans and Working Drawings," of the Standard Specifications. The plan review time will be 5 working days.

The thin HFST QCP must include:

1. Schedule for the trial work and the production work
2. Description of equipment for placing thin HFST
3. Description of equipment for measuring, mixing, placing, and finishing thin HFST
4. Method for protecting areas not be receive thin HFST and methods for protecting expansion joints at bridge locations
5. Cure time estimates for thin HFST
6. Storage and handling of thin HFST components
7. Disposal of excess thin HFST and containers
8. Contingency plan for possible failure during the thin HFST application to the travelled way

Submit a material safety data sheet for each shipment of thin HFST components before use.

Submit a Certificate of Compliance for the epoxy-resin binder and calcined bauxite aggregate topping in the thin HFST as per Section 6-1.07, "Certificate of Compliance," of the Standard Specifications. The Contractor is responsible for having material tested at a certified independent testing laboratory and then providing the verifications to the Department that the materials meet all requirements listed in these specifications.

Quality Control and Assurance

Complete a trial of thin HFST on PCC pavement before starting work. The trial location is provided in the Supplemental Project Information elsewhere in these special provisions.

The trial thin HFST must:

1. Be at least 12 feet wide by 20 feet long
2. Be constructed using the same equipment as the production work
3. Replicate field conditions, including ambient and surface temperatures, for the production work
4. Determine the initial set time for epoxy-resin binder in thin HFST
5. Determine that work can be completed within time permitted in Lane Requirement Charts as provided elsewhere in these special provisions
6. Determine that the coefficient of friction is at least 0.50 when tested in conformance with CTM 342
7. Demonstrate suitability of the proposed means and methods
8. Demonstrate the removal of thin HFST, 12 feet wide by 4 feet long.

9. Be disposed as per Section 7-1.13, "Disposal of Material Outside the Highway Right of Way," of the Standard Specifications

If the result of CTM 342 testing is below the specified value of 0.50, the Contractor will, at the Contractor's expense, remove and replace the trial thin HFST with corrective measures to meet or exceed the specified value of 0.50.

MATERIALS

The thin HFST will consist of one of the following product suppliers or equal.

PRODUCT NAME	SUPPLIER
Tyregrip	Ennis Traffic Safety Solutions 918 Ottawa Dr. Claremont, CA 91711 Phone: 1-800-331-8118
HFS High Friction Surface	CRAFCO 420 N. Roosevelt Ave. Chandler, AZ 85226 Phone: 1-800-528-8242
FlexoGrid	Poly-Carb, Inc. 33095 Bainbridge Rd. Solon, Ohio 44139 Phone: 1-800-225-5649

Epoxy-Resin Binder

Provide a two-part exothermic epoxy resin binder which holds the aggregate firmly in place, and which meets the requirements of Table 1.

Table 1

Epoxy Binder Requirements

Property	Requirement	Test Method
Ultimate Tensile Strength	2800 psi min.	ASTM D638
Elongation at break point	30% min.	ASTM D638
Compressive Strength	1600 psi min.	ASTM D695
Gel Time	10 min.	ASTM D2471
Peak Exothermic Temperature	150 degrees F min.	ASTM D2471
Water Absorption	0.25% max.	ASTM D570
Shore Hardness	70 min.	ASTM D2240
Viscosity	3000 MPa min.	ISO 2555
Bleed Test	Trace	ASTM D969
Cure Rate	3 hrs. max.	ASTM D1640, 0.2" thickness
Mixing Ratio	As recommended by manufacturer	n/a

Aggregate Topping

Furnish a blend of calcined bauxite aggregate. The aggregate topping is to be clean, dry, and free from deleterious matter. The aggregate topping must meet the requirements of Table 2.

Table 2

Aggregate Topping Requirements

Property	Requirement	Test Method
Aggregate Abrasion Value	10% max.	CTM 211
Aggregate Grading	No. 6 Sieve No. 16 sieve	95% min. Passing 5% max. Passing
Aggregate Acid Insolubility	Greater than 90%	ASTM D3042
Aggregate Magnesium Soundness	30% max.	ASTM C88

PRE-CONSTRUCTION

Pre-construction Conference

Attendance at the pre-construction conference is mandatory for:

1. Thin HFST supplier
2. Construction Foreman
3. Construction Superintendent

CONSTRUCTION

Attendance during construction activities is mandatory for:

1. Thin HFST supplier
2. Construction Foreman
3. Construction Superintendent

Prepare the deck under "Prepare Concrete Bridge Deck Surface" as provided for elsewhere in these special provisions.

The thin HFST will conform to the following requirements:

A. The minimum application coverage rate for epoxy-resin binder is 2.5 LBS/SQYD per layer.
B. The minimum application coverage rate of retained aggregate is 13 LBS/SQYD per layer.
C. Epoxy-resin components will be thoroughly mixed prior to application, then uniformly applied to the prepared surface by a mechanical method.
D. Surface preparation work, surface temperature, placement thin HFST shall be in conformance with the Supplier's specifications, these special provisions and as approved by the Engineer.
E. Thin HSFT will be allowed to cure for the minimum duration as recommended by the Supplier's specifications and during that time the application area will be closed to all vehicle and Contractor equipment traffic.
F. The surface texture of the thin HFST will be uniform and will have a coefficient of friction of not less than 0.50 as tested by CTM 342 or as approved by the Engineer. Any surface that fails to conform to the above friction requirements shall be removed and reapplied.
G. The smoothness of the finished surface on PCC bridge deck surfaces, after application of the thin HFST, will be tested with a straightedge. The surface shall not vary more than 0.25" from the lower edge of a 12+0.2-ft long straightedge placed in any direction. Any surface that fails to conform to the above tolerance shall be removed and reapplied.

Excess and loose aggregate shall be removed by power sweeping.

Utilities, drainage structures, curbs, and any other structures within or adjacent to the treatment location shall be protected against the application of the thin HFST materials.

Unless otherwise called out on the project plans, all existing pavement delineation and markers within the treatment location shall be removed prior to application of the thin HFST, then replaced after the thin HFST has cured. All existing pavement delineation and markers within or adjacent to the treatment location that are to remain as shown on the project plans shall be covered and protected.

Do not apply thin HFST to asphalt pavement surfaces that are less than 30 days old.

When magnesium phosphate concrete is placed prior to the thin HFST bridge deck overlay, the magnesium phosphate concrete shall be placed at least 72 hours prior to placing the epoxy resin.

When modified high alumina based concrete is placed prior to the thin HFST bridge deck overlay, the epoxy resin shall not be placed on the concrete until at least 30 minutes after final set of the modified high alumina based concrete.

Expansion joints and deck drains shall be adequately isolated prior to applying thin HSFT.

MEASUREMENT AND PAYMENT

Thin HFST will be measured by the square yard. The area to be paid for will be based on the dimensions shown on the plans. Areas receiving a second layer of thin HFST will be measured by the square yard, as based on the dimensions shown on the plans, and added to the first layer.

The contract price paid per square yard for thin HFST shall include full compensation for furnishing all labor, materials, tools, equipment, and incidentals and for doing all the work involved in thin HFST, complete in place, including the trial thin HFST, submittals, surface preparation, and pre-construction conference, as shown on the plans, as specified in the Standard Specifications and these special provisions, and as directed by the Engineer.

ATTACHMENT J

TRANSPORTATION MANAGEMENT PLAN

TRANSPORTATION MANAGEMENT PLAN
ADDENDUM #1

To: JUAN C. TRUPP
Project Engineer
District 1 Advance Planning

Date: 20 June 2011
File: HUM-101 PM 88.2/88.3
EA: 01-0A250K
0100020299
Off-ramp/Junction 299

From: TROY ARSENEAU, Chief
District 1 Office of Traffic Operations

The following chart shall be added to this project's SSPs and shall only be valid during the placement of the HFST.

Chart No. 4
Complete Ramp Closure Hours

County: HUM	Route/Direction: 101 NB/SB Off	PM: 88.2/88.3

Closure Limits: One off ramp may be closed.

FROM HOUR TO HOUR	24	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Mondays through Thursdays	C	C	C	C	C	C	C	C	C	C	C	C								C	C	C	C	C	
Fridays	C	C	C	C	C	C	C	C	C	C	C	C								C	C	C	C	C	
Saturdays																									
Sundays																				C	C	C	C	C	

Legend:

C Ramp may be closed completely

No ramp closures allowed.

REMARKS: The full width of the traveled way shall be open for use by public traffic when construction operations are not actively in progress.

TAA/pwh

CC: 1)TAArseneau, 2)JCandalot
1)RMMartinelli, 2) NBraafladt, 3)File
IPoindexter
BSimon
RMullen
JMcGee
AJones

ATTACHMENT K

RIGHT OF WAY DATA SHEET

State of California
Department of Transportation

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: ILENE POINDEXTER
D1 Advanced Planning Senior
Department of Transportation, District 1

Attention BRIAN SIMON
Project Engineer

Date: June 17, 2011

File: 01-HUM-101/299/PM 88.2/88.3
E.A. 0A250K
Alternate No. 1

Off Ramp @ Junction
HUM 101/299

From: DAVE MCCANLESS,
Senior Right of Way Agent
Project Delivery
Eureka

Subject: Current Estimated Right of Way Costs

We have completed an estimate of the right of way costs for the above referenced project based on information received from you on June 13, 2011 . The attached estimate is based on the following assumptions and limiting conditions:

Acquisition:
No R/W parcels are required for this revised project.

Permits:
No permits are required for this project.

Mitigation:
No mitigation is required for this revised project.

Right of Way Lead Time will require a minimum of **3** months after we receive project first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of **3** months will be required after receiving the last appraisal map to Right of Way for certification. Shorter lead times will require either more right of way resources or an increased number of condemnation suits to be filed. Either of these actions may reflect adversely on the District's other programs or our public image generally.

Dave McCanless

DAVE MCCANLESS,
Senior Right of Way Agent
Project Delivery

Attachments:
Right of Way Data Sheet

cc. RICHARD MULLEN

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

REVISED

Date: June 17, 2011

01-HUM-101/299/PM 88.2/88.3
E.A. 0A250K
Off Ramp @ Junction HUM 101/299

1. Right of Way Cost Estimate: **Alternate No. 1**

	Current Value Future Use	Escalation Rate		Escalated Value
A. Total Acquisition Cost	$0			$0
B. Mitigation acquisition & credits	$0			$0
C. Project Development Permit Fees	$0			$0
Subtotal	$0			N/A
D. Utility Relocation (State Share) (Owner's share: $0)	$0			$0
E. Relocation Assistance (RAP)	$0			$0
F. Clearance/Demolition	$0			$0
H. Title & Escrow	$0			$0
I. Total Estimated Right of Way Cost	$0		**Rounded**	**$0**
J. Construction Contract Work	$0			

2. Current Date of Right of Way Certification March 2, 2014

3. Parcel Data:

Type		Dual/Appr
X	0	
A	0	
B	0	
C	0	0
D	0	0
Total	0	

Utilities	
U4 - 1	0
- 2	0
- 3	0
- 4	0
U5 - 7	6
- 8	0
- 9	0

RR Involvements	
None	x
C&M Agrmt	
Svc Contract	
Easements	
Rights of Entry	
Clauses	

Areas:

R/W:	N/A
Excess:	N/A
Mitigation:	N/A

No. Excess Pcls: 0

Misc. R/W Work

RAP Displ	N/A
Clear/Demo	N/A
Const Permits	N/A
Condemnation	N/A
USA Involvement	No

4. Are there any major items of construction contract work?
Yes _____ No **X**

5. Provide a general description of the right of way and excess lands required (zoning, use, major improvements, critical or sensitive parcels, etc.).

No right of way required.

6. Are any properties acquired for this project expected to be rented, leased, or sold?
Yes _____ No **X**

7. Is there an effect on assessed valuation? Yes _____ Not Significant _____
No **X**

8. Are utility facilities or rights of way affected? Yes **X** No _____

Utility relocations are not anticipated; however, utility verifications will be required.

9. Are railroad facilities or rights of way affected? Yes _____ No **X**
N/A

10. Were any previously unidentified sites with hazardous waste and/or material found?
Yes _____ None Evident **X**

11. Are RAP displacements required? Yes _____ No **X**

No. of single family _____ No. of business/nonprofit _____
No. of multi-family _____ No. of farms _____

Based on Draft/Final Relocation Impact Statement/Study dated N/A
it is anticipated that sufficient replacement housing (will/will not) be available without Last Resort Housing.

12. Are there material borrow and/or disposal sites required?
Yes _____ No **X**

13. Are there potential relinquishments and/or abandonments?
Yes _____ No **X**

14. Are there any existing and/or potential airspace sites?
Yes _____ No **X**

15. What type of mitigation is required for the project?
N/A

16. Indicate the anticipated Right of Way schedule and lead time requirements. (Discuss if district proposes less than PMCS lead time and/or if significant pressures for project advancement are anticipated.)

Right of Way Lead Time will require a minimum of 3 months after we receive first appraisal maps, utility conflict maps, and the necessary environmental clearance and freeway agreements have been approved and obtained. Additionally a minimum of 3 months will be required after receiving the last appraisal map to Right of way for certification.

17. Is it anticipated that Caltrans will perform all Right of Way work?
Yes **X** No _____

STATE OF CALIFORNIA - DEPARTMENT OF TRANSPORTATION

RIGHT OF WAY DATA SHEET

Evaluation Prepared By:

Right of Way: Dave McCanless for NANCY HUESKE Date 6/20/11

Reviewed By:

RW Project Coordinator: Kevin Waxman KEVIN WAXMAN Date 6/20/2011

I have personally reviewed this Right of Way Data Sheet and all supporting information. I certify that the probable Highest and Best Use, estimated values, escalation rates, and assumptions are reasonable and proper, subject to the limiting conditions set forth, and I find this Data Sheet to be complete and current.

Dave McCanless

DAVE MCCANLESS,
Senior Right of Way Agent
Project Delivery Branch
Eureka

6/20/11

Date

ATTACHMENT L

COLLISION HISTORY
(Table B Summary)

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

M e m o r a n d u m

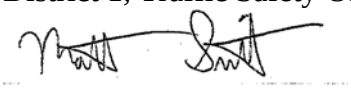
Flex your power!
Be energy efficient!

To: JUAN C. TRUPP
Advance Planning

Date: June 3, 2011

File: HUM 101
PM 88.20/88.30
EA 01-0A250K
HFST Overlay

From: MATT SMITH
District 1, Traffic Safety Office



Subject: Updated TASAS Table B Collision Analysis

A 5-year TASAS Table B collision analysis was performed for the requested segment on U.S. Route 101 at the off-ramp of Route 101 NB to Route 299 EB.

U.S. Route 101 – NB Off-Ramp to Route 299
A review was made of the recorded collisions at the northbound Route 101 off-ramp to Route 299. There were 20 collisions (0 Fatal, 5 Injury, 15 PDO) between January 1, 2004 and December 31, 2008. The actual collision rate for this segment is 5 times greater than the statewide average collision rate. The principal Primary Collision Factor on this segment of highway was "speeding" (13 of 20). The majority of the collisions were a hit object (12 of 20) type of collision. The majority of collisions occurred during daylight (15 of 20) and on a wet surface (16 of 20).

There was a collision pattern at the off-ramp. The motorists would typically lose control of the vehicle in the curve and then proceed up the embankment to the drivers left or overcorrect and enter the field to the drivers' right. Most of the collisions were caused by driving too fast for conditions according to the traffic collision reports.

Recommendation
District 1 Traffic Safety concurs with the proposal to apply a high friction surface treatment (HFST) overly on the 101N/299E ramp connector. This improvement will address the numerous run-off-road (ROR) collisions that have occurred during wet conditions.

If you have any questions please contact Matt Smith at 707-445-6443.

ATTACHMENT M

Traffic Data

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: **Brian Simon,** Project Engineer W. N.
District 1 Advance Planning

Date: April 21, 2011

File:01-HUM 101/299 NB/EB PM 88.2
EA: 01-0A250K/0100020299

From: **WILLIAM A. DAVIS**, Chief
Office of Travel Forecasting and Modeling

Re: TRAFFIC DATA & DESIGNATION REQUEST

The traffic data that you requested via email on 04/15/2011 is listed below. The off ramp AADT and the peak hour volumes are 10 and 20-year projections.

County		HUM
Highway		101
Post Mile		88.20
Annual ADT		
Base Year	2004	5,570
	2014	6,400
	2024	7,240
	2034	8,070
Peak Hour		
Base Year	2004	500
	2014	575
	2024	650
	2034	725

If you have any questions or need additional information, please contact Sathish Prakash at (530) 741-5174.

cc: files

State of California
DEPARTMENT OF TRANSPORTATION

Business, Transportation and Housing Agency

Memorandum

Flex your power!
Be energy efficient!

To: **Juan C.Trupp**
District 1 Advance Planning

Date: 01/11/2011

File: 01-HUM 101 PM 88.20/88.30
EA: 01-0A250K/0100020299

From: **WILLIAM A. DAVIS**, Chief
Office of Travel Forecasting and Modeling

Re: TRAFFIC DATA & DESIGNATION REQUEST

The traffic data that you requested via mail on 12/23/2010 is listed below. The Traffic Index (TI) design periods are 10 and 20-year projections.

County Highway Post Mile	HUM 101 88.20/88.30
10-yr TI 20-yr TI	11.0 12.0

If you have any questions or need additional information, please contact Sathish Prakash at (530) 741-5174

cc: Files